

**D-18-Z**

Roll No.....

Total No. of Questions : 8]

[Total No. of Printed Pages : 2

**HSEIIRKN15**

**6418-Z**

**BOTANY**

**(Biology)**

Time : 1½ Hours]

[Maximum Marks : 35

(Long Answer Type Questions)

5 Each

1. Define cross-pollination. Name the contrivances that favour it and describe any two of them.

Or

Describe the process of double fertilization. What is its significance?

2. What is Multiple Allelism ? Explain with the help of an example.

Or

Define genetic code. Point out its characteristics.

(Short Answer Type Questions)

3 Each

3. Why did Mendel select garden pea for his experiments ?
4. Define tissue culture. Name any three applications of tissue culture.

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Turn Over

5. Name the various interactions in a biotic community and describe any *one* of them.
6. Suggest any *three* measures for controlling pollution of our lakes.

**(Very Short Answer Type Questions)**

2 Each

7. The following very short answer type questions of 2 marks, each may be answered in a few words or few sentences or as may be required.

(a) Point out the advantages of vegetative propagation in plants.

(Any *two* points)

(b) Define induced mutations. Give *one* example.

(c) What are genetically modified crops ? Give *one* example.

(d) What is meant by nutrient cycling ?

**(Objective Type Questions)**

1 Each

8. Choose the correct/most appropriate answer and write it in your answer-book :

(i) Define mutualism.

(ii) The genotypic ratio of  $F_2$  in the monohybrid cross in :

(a) 3 : 1

(b) 2 : 1

(c) 1 : 2 : 1

(d) 1 : 1

(iii) The biotic communities in any ecological succession are called .....

(iv) Define a Sanctuary.

(v) Energy flow in an ecosystem is unidirectional. (False/True)